United States
Environmental Protection
Agency

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AR 2.1

EPA

June 26, 1992

In Reply
Refer To: HW-113

Robert L. Geddes
Senior Environmental Engineer
Monsanto Chemical Company
P.O. Box 816
Soda Springs, ID 83276

Subject: Phase 1 Remedial Investigation/Feasibility Study (RI/FS) Remedial Alternatives Development and Preliminary Screening of Candidate Technologies Memorandum

Dear Mr. Geddes:

The U.S. Environmental Protection Agency (EPA) has reviewed the Remedial Alternatives Development and Preliminary Screening of Candidate Technologies Memorandum (RADPS) which Monsanto submitted to EPA on June 5, 1992 in accordance with the RI/FS Work Plan. Enclosed for your consideration are preliminary comments based on that review. Monsanto should take these preliminary comments into consideration during development of the Phase II RI/FS Work Plan and when ready to, discuss them with EPA.

EPA has only provided preliminary comments at this time because the RADPS memo is based on data and interpretations presented in the Phase 1 Preliminary Site Characterization Summary report (PSCSR) without the benefit of EPA's comments and concerns about the PSCSR and Monsanto's response to them. While the document is responsive to the Work Plan, EPA believes that some of the comments affecting the PSCSR also affect the RADPS memorandum. For example, the list of potential constituents of concern in ground water may vary by including those chemicals that exceed secondary drinking water standards or exceed proposed standards. Another example is the potential that certain vadose zone soils may be sources for constituent release. Therefore, EPA believes this technical memorandum would be a more useful document if revisited in light of the comments concerning the PSCSR.

Since Monsanto is already preparing to respond to the comments on the PSCSR and submit the Phase II Work Plan in mid-July, EPA plans to delay final comments on the RADPS memo until after

reviewing those submissions. Monsanto does not need to respond in writing to these preliminary comments. Once the Phase II RI/FS Work Plan is submitted EPA will reevaluate this document, discuss it with Monsanto and provide final comments. At that time EPA will determine whether the RADPS memorandum is acceptable or requires revision, and Monsanto will be asked to respond to EPA's final comments in writing.

If you have any questions about these comments or would otherwise like to discuss the RADPS memo, please do not hesitate to call me at (206) 553-2100.

Sincerely,

Timothy H. Brincefield
Superfund Project Manager

cc: Gordon Brown, IDHW
Mike Thomas, IDHW
Jim Eldridge, SAIC
David Banton, Golder Associates

Enclosure

Preliminary EPA Comments on Monsanto's Phase 1 Remedial Investigation/Feasibility Study (RI/FS) Remedial Alternatives Development and Preliminary Screening of Candidate Technologies Memorandum

General Comments

1. The first paragraph on page 19 states that "the ongoing Plant operations are in compliance with applicable state and federal regulations and will not be addressed by the Remedial Action Objectives (RAOs) developed for the Feasibility Study (FS). Examples of Plant operations include permitted stack emissions and fugitive dust generated by material handling." While it may be true that Plant operations currently are in compliance, one of the nine criteria for the evaluation of alternatives required by the National Oil and Hazardous Substance Pollution Contingency Plan (NCP, 40 CFR 300) guidance is compliance with regulations and whether the alternatives meet all applicable or relevant and appropriate state and federal laws (ARARs). Since the permitted activities are existing ARARs, an evaluation of these activities is required and must be addressed.

   EPA recognizes that Monsanto has implemented significant air quality control technologies over the past several years and is committed to improve emission control (e.g., at the nodule reclaim area). Nevertheless, these technologies cannot be excluded from the evaluation process under Superfund. Therefore, the development of RAOs and remedial alternatives must include activities covered by other laws.

2. The two preliminary RAOs presented for each media (source materials/soil, ground water, surface water/effluents, sediments, and air) are virtually identical. The simplistic nature of these RAOs do not account for distinct differences that exist within each medium or interrelationships between each media. For example, RAOs for baghouse dusts should be expressed differently than RAOs for vadose zone soils. While we agree that basic premises of each RAO are the prevention of releases and migration of hazardous substances and prevention of adverse risks to human and environmental receptors, the potential remedial action objectives for various components in each media should be more specific.

3. In the development and screening of alternatives (Section 4), there is minimal explanation as to why several of the process options were screened out during the development

of each alternative. Instead, the chosen alternatives are presented with only a discussion of the selected process options. For example, it is unclear why the synthetic liners and/or the asphalt covers were screened out under the soil alternatives. In addition, most of the process options included in alternatives SM-5, SOIL-6, and SED-4 are identical. Apparently, some options or other combinations of process options were screened out without explanation. A rationale should be provided for those process options that were not retained in the alternatives.

Specific Comments

1. Page 19, Section 2.1. Fugitive dust source areas, stack emissions, and vadose zone soils should be included in the list of potential sources of constituent releases. See also general comment #1. An evaluation of technologies and process options for these sources should be carried throughout the report.

2. Page 20, Section 2.1. Constituents of potential concern in source areas could be screened by comparison with risk-based reference concentrations similar to the risk screening for soils since several of the exposure pathways associated with the soils and source materials are also similar.

3. Page 21, Section 2.2. It is stated that several constituents "are not expected to pose unacceptable health or ecological risks, and are therefore eliminated from further considerations with respect to fate, transport, and detailed risk evaluation." The constituents proposed for elimination in the process should be evaluated as to their potential contribution to the overall risks prior to their elimination, especially since some concentrations of these constituents exceed secondary drinking water standards.

4. Page 22, Section 2.2. The exposure pathways associated with ground water should also include other downgradient wells and springs (i.e., Southwest spring, Mormon springs, Calf spring). Wells and springs used for stock watering proposes may also contribute to exposures.

5. Page 22, Section 2.3. Occasionally waterfowl and other animals are attracted to the non-contact cooling water. The effluent water is also occasionally used to irrigate the adjacent horse pasture. Thus, exposure pathways can be further defined.